

Combustion synthesis and consolidation of Ni-W nanocomposite material

Zakaryan, Marieta; **Aydinyan, Sofiya**; Kharatyan, Suren Ceramics in modern technologies 2019 / p. 67-74
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Combustion synthesis and reactive spark plasma sintering of non-equiatomical coal-based high entropy intermetallics

Kuskov, Kirill Vasilevich; Nepapushev, Andrey A.; **Aydinyan, Sofiya**; Shaysultanov, Dmitry G.; Stepanov, Nikita D.; Nazaretyan, Khachik; Kharatyan, Suren; Zakharova, Elena V.; Belov, Dmitry S.; Moskovskikh, Dmitry O. Materials 2023 / art. 1490
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Combustion synthesis of TiC-ZrC composite powder : role of mechanical activation

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DTATG study of NiO Reduction by Mg+C combined reducer

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Fabrication of Cu-Mo composites combining SHS and SLS technologies : poster presentation

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High-entropy (Ti_{0.4}Ta_{0.4}V_{0.4}Nb_{0.4}Cr_{0.4})AlC MAX phase synthesized by SHS : structural, thermal, and mechanical insights

Melkonyan, S.; Zakaryan, Marieta; Grigoryan, Y.; **Hussainova, Irina**; **Aydinyan, Sofiya**; Kharatyan, Suren JTACC+V4 2025 : 4th Journal of Thermal Analysis and Calorimetry Conference & 10th V4 (Joint Czech-Hungarian-Polish-Slovak) Thermoanalytical Conference : Book of Abstracts 2025 / p. 179 <https://static.akcongress.com/downloads/jtacc/jtacc2025/jtacc2025-boab.pdf>

The influence of thermal dilution on the microstructure evolution of some combustion-synthesized refractory ceramic composites

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Joint reduction of NiO + WO₃ oxides by combined Mg/C reducer. Synergetic effect

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Joint reduction of NiO/WO₃ pair and NiWO₄ by Mg + C combined reducer at high heating rates

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Kinetic highlights of the reduction of silver tungstate by Mg + C combined reducer

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Magnesium-carbothermal reduction of CuWO₄/MeO nanostructured precursors & synthesis of W/Cu composite materials

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The mechanism of joint reduction of MoO₃ and CuO by combined Mg/C reducer at high heating rates

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Mo-Cu pseudoalloys by combustion synthesis and spark plasma sintering

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Nanosize molybdenum carbide preparation by sol-gel combustion synthesis with subsequent fast heating

Kirakosyan, Hasmik; Nazaretyan, Khachatur; Kirakosyan, Khachatur; Tumanyan, M.E.; **Aydinyan, Sofiya**; Kharatyan, Suren Chemical Journal of Armenia 2017 / p. 11-19 : ill <http://chemistry.asj-oa.am/id/eprint/7782>

Nanosized molybdenum carbide synthesized by solution combustion synthesis with subsequent thermal treatment

Nazaretyan, Khachik; Kirakosyan, Hasmik; **Aydinyan, Sofiya**; Kharatyan, Suren SHS 2017 : XIV International Symposium On Self-Propagating High Temperature Synthesis, September 25-28, 2017, Tbilisi, Georgia : Book of Abstracts 2017 / p. 175-176 : ill

Nanostructural evolution in mesoporous networks using in situ high-speed temperature scanner

Kamboj, Nikhil Kumar; Aghayan, Marina; Rubio-Marcos, Fernando; Nazaretyan, Khachatur; Rodriguez, Miguel Angel; Kharatyan, Suren; **Hussainova, Irina** Ceramics international 2018 / p. 12265-12272 : ill <https://doi.org/10.1016/j.ceramint.2018.04.010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A new synthesis pathway for molybdenum carbide nanopowder by solution combustion

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NiO and WO₃ coreduction by combined reducers Mg/C and preparation of W-Ni alloy [Online resource]

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Phase and microstructure evolution patterns at combustion synthesis of high-entropy M₂AlC (M=Ti/Ta/V/Nb/Cr) MAX phase

Melkonyan, Syuzanna; Zakaryan, Marieta; Grigoryan, Yeva; Kharatyan, Suren; **Hussainova, Irina;** Chabanais, Florian; Shamshirgar, Ali Saffar; Persson, Per O. A.; Rosen, Johanna; **Aydinyan, Sofiya** Journal of materials research and technology 2025 / p. 5800-5807 <https://doi.org/10.1016/j.jmrt.2025.10.186>

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Reaction pathway in the WO₃-NiO-Mg-C system. DTA/TG study

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Reduction mechanism of WO₃ + CuO mixture by combined Mg/C reducer : non-isothermal conditions - high heating rates

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Selective Laser Melting Of Combustion Synthesized 2Mo-Cu and 3Cu-Mo Composites

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SHS reprocessing of copper oxide waste into copper powder

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SHS-derived powders by reactions' coupling as primary products for subsequent consolidation

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Solution combustion synthesis and spark plasma sintering of magnetic high entropy materials

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Solution combustion synthesis of MnFeCoNiCu and (MnFeCoNiCu)₃O₄ high entropy materials and sintering thereof

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Solution combustion synthesis of nanostructured molybdenum carbide

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Study of reduction mechanism of WO₃+CuO mixture by combined Mg/C reducer - influence of high heating rate

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Synthesis and consolidation of Mo-Cu composite nanopowder [Online resource]

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Synthesis of Ni–W nanopowders from oxide and salt precursors in combustion mode by using thermo-kinetic coupling approach [Online resource]

Zakaryan, Marieta; **Aydinyan, Sofiya**; Kharatyan, Suren Explosive Production of New Materials : Science, Technology, Business, and Innovations 2018 / p. 298-300 : ill http://www.ism.ac.ru/events/EPNM2018/EPNM2018_BookofPapers.pdf <http://dx.doi.org/10.30826/EPNM18-103>

The mechanism of WO₃(MoO₃) & CuO coreduction by combined Mg/c reducer at non isothermal conditions

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Термическое и кинетическое сопряженные реакций при самораспространяющемся высокотемпературном синтезе материалов

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